

REMARKS

Status Of Application

Claims 1, 3, 4, 6-8, 10, 11, 16-18 and 20-32 are pending in the application; the status of the claims is as follows:

Claim 29 is rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter.

Claim 29 is rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

Claims 1, 3, 4, 6-8, 10, 11, and 16-18 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement.

Claims 1, 3, 4, 6-8, 10, 11, and 16-18 are rejected under 35 U.S.C. § 101 because the claimed invention is not supported by either a specific or substantial asserted utility or a well established utility.

Claims 20-32 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,968,294 B2 to Gutta et al ("Gutta").

Claims 20, 29, and 30 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Japanese Published Application No. 63-41000 ("41000").

Claim Amendments

Claim 29 has been amended to correct matters of form. These changes do not introduce any new matter.

35 U.S.C. § 101 Rejection

The rejection of claim 29 under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter, is respectfully traversed based on the following.

Claim 29 has been amended to read “[a] computer readable medium encoded with a program which can be run by a computer.” Therefore, Applicants respectfully submit that claim 29 is now directed to statutory subject matter.

Accordingly, it is respectfully requested that the rejection of claim 29 under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter, be reconsidered and withdrawn.

35 U.S.C. § 112 Rejections

The rejection of claim 29 under the first paragraph of 35 U.S.C. § 112 as failing to comply with the written description requirement, is respectfully traversed based on the following.

The Office Action states that the specification does not disclose a computer readable medium as stated in claim 29. Applicants respectfully disagree. As stated in ¶ [0031], “[t]he ROM 21 stores a program executed by the microcomputer 22.” ROM 21 is a computer readable medium on which a program is encoded as claimed in claim 29. Therefore, claim 29 is fully supported by the specification and complies with 35 U.S.C. § 112.

Accordingly, it is respectfully requested that the rejection of claim 29 under the first paragraph of 35 U.S.C. § 112 as failing to comply with the written description requirement, be reconsidered and withdrawn.

The rejection of claims 1, 3, 4, 6-8, 10, 11, and 16-18 under the first paragraph of 35 U.S.C. § 112 as failing to comply with the enablement requirement, is respectfully traversed based on the following.

The Office Action states that:

Claim 1 (similarly claim 16) recites a determining unit determining said trigger signal as a valid signal when no change is detected in images in said detector within a predetermined time from the input of said trigger signal to said signal input unit. Since as indicated in figure 3 of the present application, step S15 is checked to see if 1) moving object detected OR time-out and it is clearly shown (feed back loop to step S14), when there is NO moving object detected, there is only one option and it is to return to step S14, there is nothing in figure 3 that shows when there is NO moving object detected, go to step S20 as argued and the present specification uses different criteria to go the step S20 not to use motion object detection step.

Applicants respectfully submit that this is not a fair or logical reading of Figure 3. Step 15 is a three-way decision step. Step S15 is labeled “MOVING OBJECT DETECTED OR TIME-OUT?”. The three branches are clearly labeled. The first branch is labeled “NO,” which means that no moving object was detected. In this case, the process loops back to Step S14. The second branch (beneath the box) is labeled “DETECTION OF MOVING OBJECT.” If a moving object was detected, the process proceeds to Step S16. The third branch is labeled “TIME-OUT,” which means that a predetermined count of NO loops to Step S14 has occurred. In this case, the process proceeds to Step S20. As explained in the specification:

[0046] The controller 32 makes a determination as to whether or not the moving-object has been detected in the moving-object detector 31, and also makes a determination as to whether or not a predetermined counted value has been reached through the counting operation so as to make a determination as to time-out (step S15). Herein, when no moving-object has been detected without time-out, the moving-object detection process (step S14) are repeatedly executed. In contrast, upon receipt of the information that any moving object has been detected, the sequence proceeds to step S16, while in the case of the time-out, the sequence proceeds to step S20.

The limitation of claim 1 in question currently reads:

a determining unit which determines that said trigger signal is a valid signal when said detector detects no change in the images within a

predetermined time from the input of said trigger signal to said signal input unit; and ...

If no movement is detected in a predetermined time a TIMEOUT occurs and process branches to Step S20. If the TIMEOUT is determined to be abnormal in step S20, the trigger signal is determined to be valid at Step S21. Therefore, a determining unit as claimed in Claim 1 is fully described in the specification. Claims 3, 6-8, 10, 11 include this limitation by dependency from claim 1, and are thus also fully supported. Claim 16 includes a limitation of “determining said trigger signal is a valid signal when no change is detected in the images within a predetermined time from the input of said trigger signal.” As noted, this step is clearly supported by the specification. Claims 17 and 18 include this limitation by dependency from claim 16, and are also fully supported.

Accordingly, it is respectfully requested that the rejection of claims 1, 3, 4, 6-8, 10, 11, and 16-18 under the first paragraph of 35 U.S.C. § 112 as failing to comply with the enablement requirement, be reconsidered and withdrawn.

35 U.S.C. § 102(e) Rejection

The rejection of claims 20-32 under 35 U.S.C. § 102(e) as being anticipated by Gutta is respectfully traversed based on the following:

Gutta shows a system in Figure 1 where cameras 135 and 136 are connected to image processor 305 to receive unspecified video images. The output of image processor 305 is provided to controller 100. Inputs to controller 100 are also provided by audio transducers and sensors 141. “Sensors 141 may include alarm sensors such as breathing monitors or other SIDS prevention detectors or any other type of sensor such as temperature sensors, position sensors, security switches, proximity sensors, electrical load sensors, ambient light sensors, etc.” (5:1-5). Controller 100 processes these and other inputs as illustrated in Figure 3 to produce outputs, such as alarms generated by alarm output/UI 445. Although no information other than “Artificial Intelligence (AI) principles” is provided as to how the input information is processed, Gutta purports to be able to discern, among other things (3:22-29):

3. movement (crawling) of the person requiring care into prohibited areas of a room,
4. sudden movement consistent with falling, running, normal walking, crawling, etc.,
5. lack of normal movement such as rapid movement such as an infant or child being picked up at a time other than a previously defined time,
....

In contrast to the cited references, claim 20 includes:

a determining unit which determines said trigger signal is an invalid signal when said detector detects a change in the images within a predetermined time period between a first time from the input of said trigger signal to said signal input unit and a second time subsequent to said first time, and determines said trigger signal is a valid signal when said detector detects a change in images before said first time or after said second time; ...

Gutta does not provide any operational description of any detection process other than to say that classifier 510 is trained to do so (5:14-49). Gutta does not describe any particular trigger signal, though it describes many sensors that may be programmed to produce trigger signals with the assistance of hindsight and the teachings of applicants' specification. However, there is no teaching or suggestion in Gutta of a "detector [that] detects a change in the images within a predetermined time period between a first time from the input of said trigger signal to said signal input unit and a second time subsequent to said first time, and determines said trigger signal is a valid signal when said detector detects a change in images before said first time or after said second time." As described in applicants' specification in ¶¶ [0048] and [0049], this type of detector allows for discriminating between normal activity and abnormal activity:

[0048] For example, when the detection sensor 100 is attached as a door sensor so that the camera unit 10 captures images in the vicinity of a passage connecting to the door, the period of time from the opening of the door until the time at which a certain person has passed through the passage tends to fall within a predetermined range in a normal case. In contrast, in the case of a suspicious intruder, the intruder tends to walk faster than the normal walking speed or walk very slowly, with the result that the period of time from the

opening of the door until the time at which the person has passed through the passage does not fall within the predetermined range in some cases.

[0049] For this reason, when the period of time (T1–T0) from the input of the trigger signal by the detection sensor 100 to the detection of the moving object falls within a predetermined range, the signal determination unit 33 determines that the trigger signal is derived from not the detection of an abnormal state, but the detection of a normal state, and recognizes the inputted trigger signal as an invalid signal (step S18). In contrast, when the period of time (T1–T0) from the input of the trigger signal by the detection sensor 100 to the detection of the moving object does not fall within a predetermined range, it determines that the trigger signal is derived from the detection of an abnormal state, and recognizes the inputted trigger signal as a valid signal (step S21).

Gutta does not describe any detection process, much less the detection process in the above-quoted section of claim 20. To anticipate, a reference must show, expressly or inherently, every limitation of the claim. MPEP § 2131. Therefore, claim 20 is not anticipated by the cited references. Claims 21-28 are dependent upon claim 20, and thus include every limitation of claim 20. Therefore, claims 21-28 are also not anticipated by the cited references.

Also in contrast to the cited references, claim 29 includes,

determining said trigger signal is an invalid signal when a change in images is detected within a predetermined time period between a first time from the input of said trigger signal and a second time subsequent to said first time, and determining said trigger signal as a valid signal when a change in images is detected before said first time or after said second time;

As noted above, Gutta does not describe any detection process, much less the detection process in the above-quoted section of claim 29. Therefore, the cited references do not anticipate claim 29.

Also in contrast to the cited references, claim 30 includes,

determining said trigger signal is an invalid signal when a change in the images is detected within a predetermined time period between a first time from the input of said trigger signal and a second time subsequent to said first time, and determining said trigger signal is a valid signal when a change in images is detected before said first time or after said second time;

As noted above, Gutta does not describe any detection process, much less the detection process in the above-quoted section of claim 30. Therefore, the cited references do not anticipate claim 30. Claims 31 and 32 are dependent upon claim 30, and thus include every limitation of claim 30. Therefore, claims 31 and 32 are also not anticipated by the cited references.

Accordingly, it is respectfully requested that the rejection of claims 20-32 under 35 U.S.C. § 102(e) as being anticipated by Gutta be reconsidered and withdrawn.

35 U.S.C. § 103(a) Rejection

The rejection of claims 20, 29, and 30 under 35 U.S.C. § 103(a), as being unpatentable over 41000, is respectfully traversed based on the following.

41000 shows a device including two cameras 1a and 1b spaced a known distance along a road and continuously capturing images (Page 1, line 18 – page 2, line 5). Image processing devices 2a and 2b process the images from cameras 1a and 1b, respectively. When an image of the same vehicle is identified, the time difference between capture of the two images is used to determine the speed of the vehicle.

In contrast to the cited references, claim 20 includes:

a determining unit which determines said trigger signal is an invalid signal when said detector detects a change in the images within a predetermined time period between a first time from the input of said trigger signal to said signal input unit and a second time subsequent to said first time,

and determines said trigger signal is a valid signal when said detector detects a change in images before said first time or after said second time; ...

There is no suggestion of a trigger signal in the 41000 reference. The cameras operate continuously (Page 2, lines 1-5). Furthermore, there is no suggestion of detecting "a change in the images within a predetermined time period." Both cameras take still images. These images are compared to see if the same vehicle is present. There is not attempt to detect movement at either camera. Because there is no suggestion of these limitations, they would not have been obvious to one of skill in the art from the reference.

"All words in a claim must be considered in judging the patentability of that claim against the prior art." MPEP § 2143.03 (entitled "ALL CLAIM LIMITATIONS MUST BE CONSIDERED") *quoting In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). Thus, considering every limitation of claim 20, there is no reason why one skilled in the art would have considered the invention of claim 20 obvious and there is no factual basis to support a *prima facie* conclusion of obviousness. "The key to supporting any rejection under 35 U.S.C. § 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious." MPEP § 2143.03. Therefore, claim 20 would not have been obvious over the cited references to one skilled in the art at the time of the invention. Thus, claim 20 complies with 35 U.S.C. § 103. Claims 29 and 30 are dependent upon claim 20, and thus include every limitation of claim 20. Therefore, claims 29 and 30 also comply with 35 U.S.C. § 103.

Accordingly, it is respectfully requested that the rejection of claims 20, 29, and 30 under 35 U.S.C. § 103(a) as being unpatentable over 41000, be reconsidered and withdrawn.

CONCLUSION

Wherefore, in view of the foregoing amendments and remarks, this application is considered to be in condition for allowance, and an early reconsideration and a Notice of Allowance are earnestly solicited.

Application No. 10/733,493
Amendment dated July 9, 2008
Reply to Office Action of March 19, 2008

This Amendment does not increase the number of independent claims, does not increase the total number of claims, and does not present any multiple dependency claims. Accordingly, no fee based on the number or type of claims is currently due. However, if a fee, other than the issue fee, is due, please charge this fee to Sidley Austin LLP Deposit Account No. 18-1260.

If an extension of time is required to enable this document to be timely filed and there is no separate Petition for Extension of Time filed herewith, this document is to be construed as also constituting a Petition for Extension of Time Under 37 C.F.R. § 1.136(a) for a period of time sufficient to enable this document to be timely filed.

Any other fee required for such Petition for Extension of Time and any other fee required by this document pursuant to 37 C.F.R. §§ 1.16 and 1.17, other than the issue fee, and not submitted herewith should be charged to Sidley Austin LLP Deposit Account No. 18-1260. Any refund should be credited to the same account.

Respectfully submitted,

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